

This invention is in the field of optical device and electronic image storage device . This invention have observed that the doctor does surgical operate to patient and to record it .

These theory and property are follows : By reason of a lens forms an image by using the device of video camera , then the image is transmitted by cable to the video cassette recorder and to display on the monitor for viewing and recording it .

If the mistakes or the wrong operate by doctor (or operator) was happen , the observer (chief doctor or patient ' s relatives) only pressing the switch of another electric circuit with sounder down , the electric circuit is closed , can inform the operator by the lamp and the sounder , and to correct it immediately .

So it can be avoid that the accident of surgical operation of doctor could be happen .

[FIGURE] :

Fig . 1) The electronic image storage device consists of a lens of video camera , video cassette recorder and television through a cable .

Fig . 2) The electric circuit contained by the switch , red lamp , sounder , cell , and the wire .

Fig. 1)

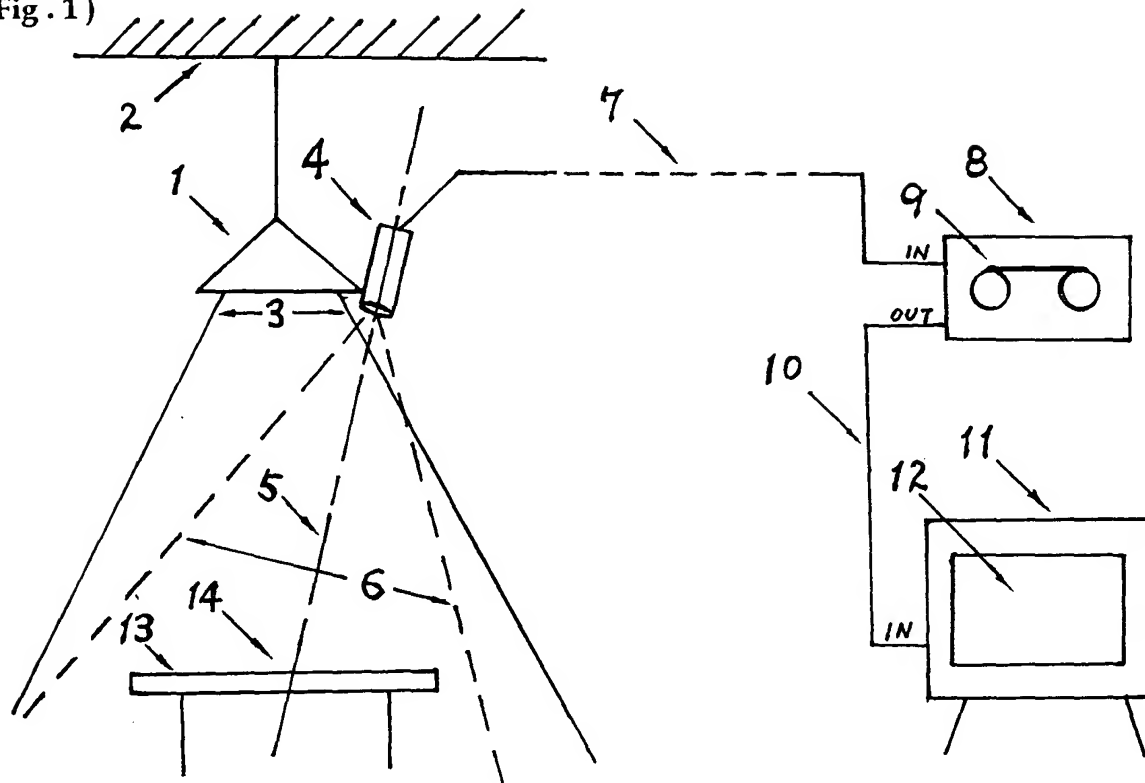
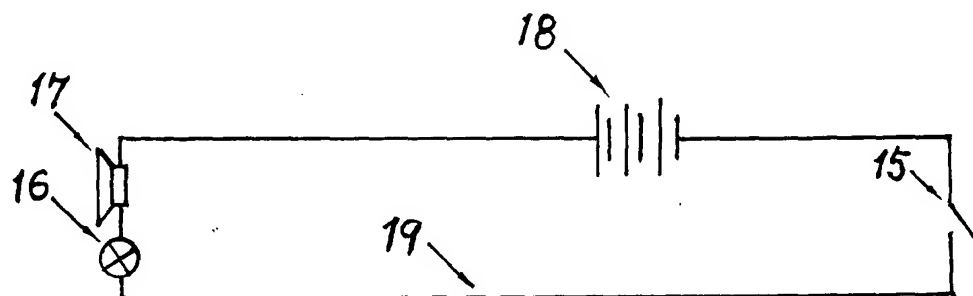


Fig. 2)



- | | |
|------------------------------------|---------------------|
| 1) Operate lamp . | 11) Television . |
| 2) Ceiling . | 12) Screen . |
| 3) The region of lamp light . | 13) Operate table . |
| 4) The lens of video camera . | 14) Object . |
| 5) Axis of lens . | 15) Switch . |
| 6) The region of viewing by lens . | 16) Red lamp . |
| 7) Cable . | 17) Sounder . |
| 8) Video cassette recorder . | 18) Storage cell . |
| 9) Video cassette tape . | 19) Wire . |
| 10) Cable . | |

DESCRIPTION

1) TITLE OF THE INVENTION :

The title of this invention is : " The way to avoid the accident of surgical operation of doctor and it's observable appliance . "

2) THE ART FIELD :

This invention is in the field of optical device with electronic image storage device . By reason of the lens forms an image . The electronic image storage device is consists of a lens of video camera , video cassette recorder , and monitor . This invention is a new kind of useful of electronic image storage device .

3) BACKGROUND OF THE INVENTION :

The prior art of electronic observable device is widely used in the human life and industry production . In the factory , the supervisor can sit in the office to observed and to operate the

process of industry production . In the bank , the manager can to see the cashier 's performance by use electronic observable device and accident as well . This instrument can also used by the guarder of building to record person entrance time , If there is an accident , people could consult the tape , which is recorded by electronic observable device , to check up when , where and who is in this place , therefore to look out who is caused of accident .

In all , it concludes that the electronic observable device , which is named " The electronic image storage device " , consists of A lens of video camera , Video cassette recorder , and Monitor through a cable . They can connect a few of different products for different use . Therefore , We can making various related electronic image storage device according to specific purpose . This invention is a specifically designed for new kind of useful of electronic image storage device .

4) THE INTENTION OF THIS INVENTION :

When the doctor makes surgical operation . If his judgment is correct and the operation will be done according to the operational plan , it is a perfect operation . In other words , if the pain can relieve or the aggravation can be controlled , it proved that it is a successful operation .

But in fact , sometimes there might have mistakes during the operation . For example , Because of doctor carelessness , they operate the wrong body part or mistakenly cut the other normal body part . According to the report of the news paper , the accident of surgical operation hurt about 1 Million people and lead to hundred thousands people losing their lives per year only in the U . S . So the importance of this invention is that it could reduce these kinds of accidents happen , that is also the intention of this invention . **The intention of this invention is to looking for a way to protect patient from accident injury in surgical operation and to help doctor to avoid the mistakes in the surgical operation by observation to surgical operation .**

These theory and property are following : By reason of use the electronic image storage device . Place the lens of video camera to the above operate table nearer by operate lamp , then connect through a cable to the video cassette recorder , then to the monitor . Through electronic image storage device we can viewing and recording the all process of surgical operation , which the doctor does the operation to patient , and we can to know which part of body had been cut in the doctor's surgical operation .

Although , sometime for purpose of medical studies and research there are make a pictures of surgical operation . But this is a difference idea and intention with this invention .

The specific property of this invention are :

1) The intention of this invention is to looking for the way to avoid the accident happen of surgical operation of doctor .

2) The intention of this invention is to protect patient from accident injury in the surgical operation of doctor .

3) This invention is a new specific device to observe the process of surgical operation . This invention is used by other chief doctor or patient's relative to viewing and recording the process of surgical operation .

This invention will be beneficial to the following principal aspect :

1) If the doctor and operator mistakenly operate the wrong part of body in the surgical operation . This invention could be used by observer (either chief doctor or patient's relatives) to call the operator to report the mistake and to correct it immediately . Therefore it could avoid the accident happen .

2) After operation , the patients could consult records to know which inward organs of his body has been cut . Therefore , they

could better understand their recovery after operation . In that case , they will feel very inward peace .

3) Through observation it could promote doctor to do operation more responsible and more best . It also could prevent the doctor cheat patient after the failure of operation .

4) If there is any accident happen . People could consult the records , therefore , it is a convenient way to judge the causes of the accident .

5) Because everything is recorded during the operation , so the doctor must be very careful in surgical operation , therefore , the accident will be greatly decreased . On the other hand , the funds , used to claim compensation for failure of operation , will be greatly decreased also . In that case , the cost of responsible accident ' s insurance and operation expenses for the doctor could be greatly decreased . Finally , it will save the public insurance expenses of operation and health plan .

In all , the patient could increase the trust towards the hospital equipment , doctor ' s art and safety in operation .

5) SUMMARY OF THE INVENTION :

This invention is in the field of optical device and electronic image storage device . This invention have observed that the doctor does surgical operate to patient and to record it . These theory and property are follow : By reason of the lens forms an image by using the device of video camera , then the image is transmitted by cable to the video cassette recorder and to display on the monitor for viewing and to recording it .

Place a lens of video camera to the above operate table nearer by operate lamp , By reason of the lens forms an image , focus the lens of video camera and adjust the axis of lens toward to the object , that the object (which is placed on the operate table) can be viewing very clearly . Then the image can be transmitted by cable (or by wireless) to the video cassette recorder which can to receipt of it and to record of it . Then the image can be transmitted to the monitor to display on the screen of the monitor also .

There are open the all device when the surgical operation is beginning . We can viewing and recording the process of surgical operation by doctor at same time .

If the mistakes or the wrong operate by doctor was happen , the observer (chief doctor or patient 's relatives) only pressing the another electric circuit switch down , the electric circuit is closed ,

can inform to the operator by the lamp and the sounder and to correct it immediately .

So it can be avoid that the accident of surgical operation of doctor could be happen .

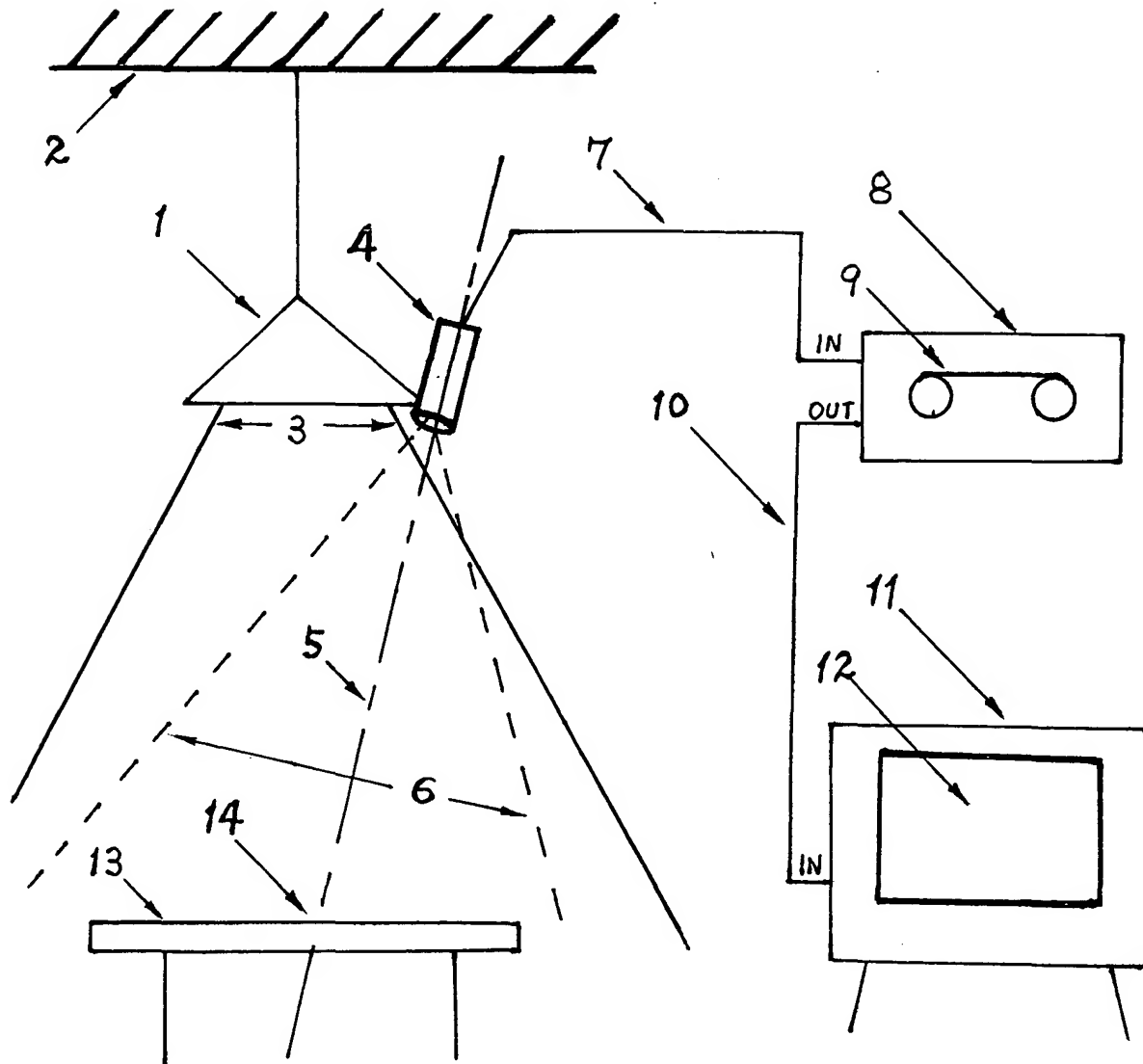
6) BRIEF DESCRIPTION ON THE DRAWINGS : (4 drawing sheets)

Fig . 1 : The electronic image storage device consists of the lens of video camera , video cassette recorder and television through a cable .

Fig . 2 : The electronic image storage device consists of the lens of video camera , computer with CD – Recorder (such as CD – RW , CD – Recordable , CD – Rewritable) and monitor through a cable .

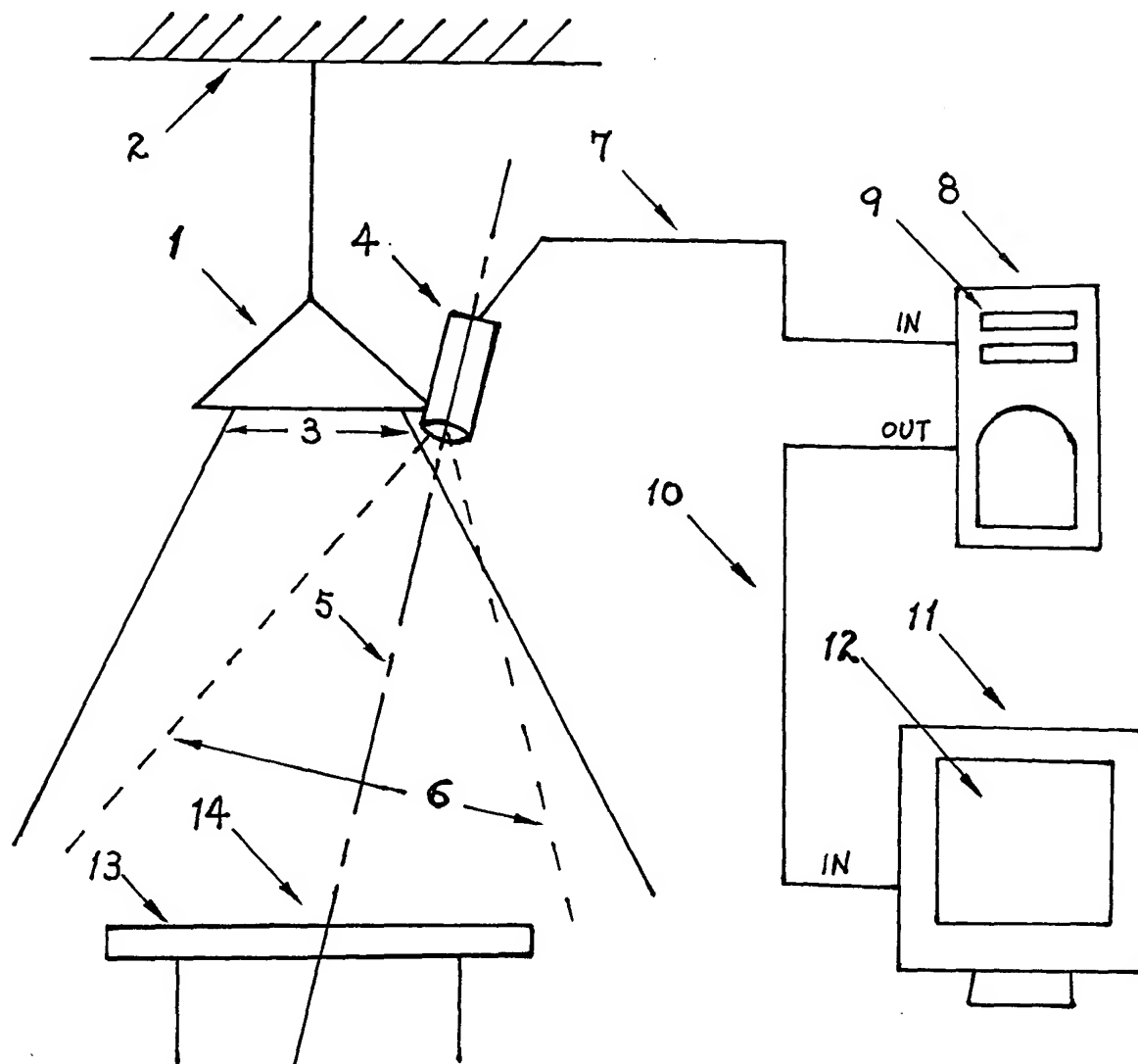
Fig.3 : The electronic image storage device consists of the lens of video camera with infrared Light emitted device , and the television with video cassette recorder through a cable (or transmitter by wireless) .

Fig.4 : The electric circuit contained by the switch , red lamp , sounder , cell , and the wire .



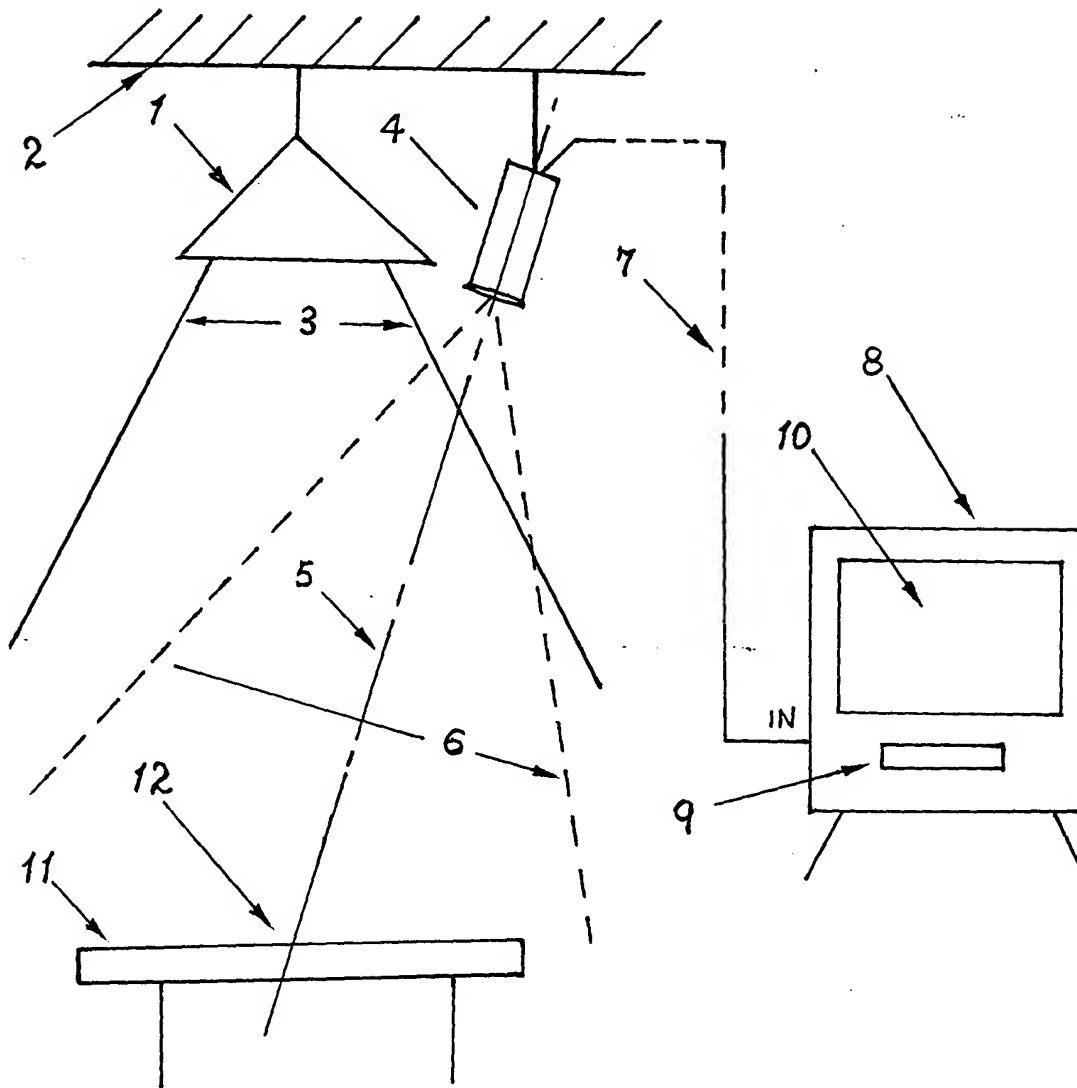
- 1) Operate lamp .
- 2) Ceiling .
- 3) The region of lamp light .
- 4) The lens of video camera .
- 5) Axis of lens .
- 6) The region of viewing by lens .
- 7) Cable .

- 8) Video cassette recorder .
- 9) Video cassette tape .
- 10) Cable .
- 11) Television .
- 12) Screen .
- 13) Operate table .
- 14) Object .

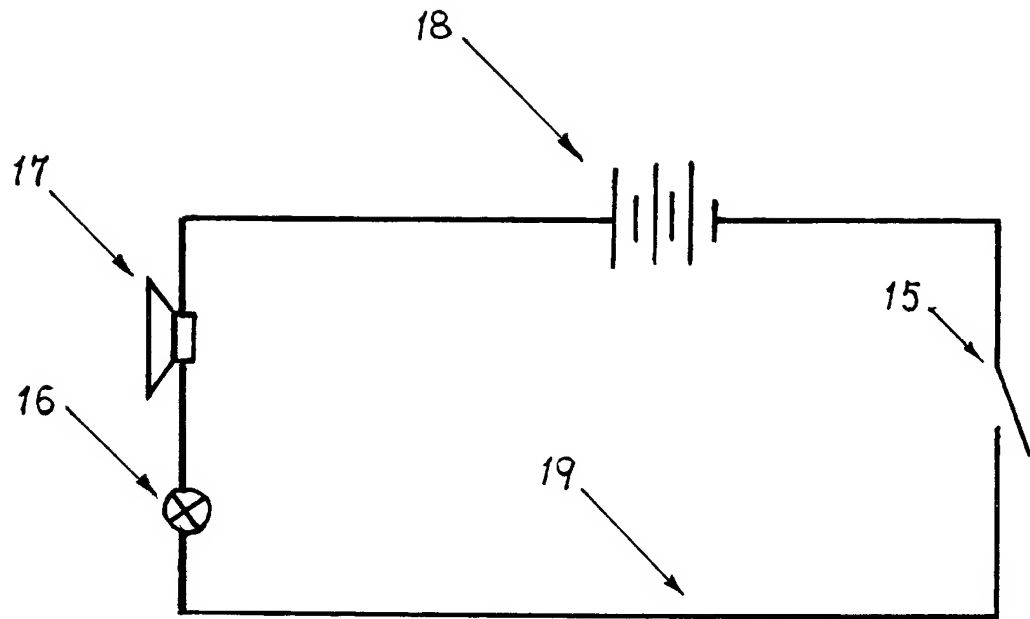


- 1) Operate lamp .
- 2) Ceiling .
- 3) The region of lamp light .
- 4) The lens of video camera .
- 5) Axis of lens .
- 6) The region of viewing by lens .
- 7) Cable .

- 8) CD -- Recorder of computer .
- 9) CD -- Disk .
- 10) Cable .
- 11) Monitor .
- 12) Screen .
- 13) Operate table .
- 14) Object .



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|------------------------------------|--|
| 1) Operate lamp . | 8) Television with Video cassette recorder . |
| 2) Ceiling . | 9) Video cassette tape . |
| 3) The region of lamp light . | 10) Screen . |
| 4) The lens of video camera . | 11) Operate table . |
| 5) Axis of lens . | 12) Object . |
| 6) The region of viewing by lens . | |
| 7) Wireless by transmitter . | |



- 15) Switch .
- 16) Red lamp .
- 17) Sounder .

- 18) Storage cell .
- 19) Wire .

7) DETAILED DESCRIPTION OF THE INVENTION :

Turning generally to Fig . 1 . The electronic image storage device consists of a lens of video camera , video cassette recorder and television through a cable .

To use this device , first placed the lens of video camera (4) to the above operate table (13) nearer by operate lamp (1) [or at the ceiling (2)] . Then focus the lens (4) and adjust the axis of lens (5) toward to the object (14) , which is on the operate table (13) , And the object (14) can be viewing very clearly by the lens of video camera (4) .

The video cassette recorder (8) and the television (11) could be placed to the another observable waiting room . There are the chief doctor or patient's relative can viewing and recording it .

The cable (7) is connect with the lens of video camera (4) and the in terminal of the video cassette recorder (8) . Then the

cable (10) is connect with the out terminal of the video cassette recorder (8) and the in terminal of the television (11) too .

But make sure the power to the all device is turned off . And the power supply is unplugged from the power source when connecting the device of the lens of video camera .

When the surgical operation by doctor is beginning . There are only push the switch of all device to turned on .

By reason of the lens forms an image by using the lens of video camera (4) . The object (14) , which is the part of surgical operation on the operate table (13) , forms an image by lens (4) , and transmits this image through cable (7) to the video cassette recorder (8) to recording it . Then the image could be transmitted by cable (10) to the television (11) to display on the screen (12) .

The observer can be viewing and recording the all process of this surgical operation .

Then placed the red lamp (16) [see Fig . 4] and the sounder (17) to the operate room nearby the operate table (13) . And placed the switch (15) in the observable waiting room nearby the television (11) . The wire (19) is connect with the switch (15) , red lamp (16) , sounder (17) and the storage bell (18) .

If the mistakes or the wrong operate by doctor was happen , the observer (chief doctor or patient 's relatives) only pressing the switch (15) down to turned on , the electric circuit is closed , it can inform the doctor and operator by the red lamp (16) and the sounder (17) , and to correct it immediately .

So it can be avoid that the accident of surgical operation of doctor could be happen .